Docket No.: M3653.0001/P001-C
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#12

In re Patent Application of:
Douglas Clark

Application No.: 09/536,377 Group Art Unit: 3625

Filed: March 28, 2000 Examiner: Forest Thompson, Jr.

For: METHOD AND APPARATUS FOR PLANNING AND MONITORING MULTIPLE TASKS BASED ON USER DEFINED CRITERIA AND PREDICTIVE ABILITY AND FOR AUTOMATICALLY DETECTING TASK RELATED WORK

CORRECTED APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This brief is in furtherance of the Notice of Appeal, filed in this case on July 21, 2003.

The fees required under § 1.17(f) and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief is transmitted in triplicate.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Metier, Ltd., of Washington, D.C. (Metier). An assignment of the invention by the inventor to Metier was recorded at Reel 011144, Frame 0732.

II. RELATED APPEALS AND INTERFERENCES

An appeal is pending in the parent application, i.e. U.S. Application Serial No. 09/334,256 ("the '256 application"), to which priority is claimed in the present application. Also, Notices of Appeal have been filed in two other related applications which also claim priority to the '256 application. The U.S. Application Serial Nos. for these two applications are 09/536,383 and 09/536,378. Appeal Briefs have been filed in both of these applications, and Appellant expects that these applications will also ultimately be submitted for appeal before the Board of Patent Appeals and Interferences.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 28 claims pending in application.

B. Current Status of Claims

1. Claims pending: 1, 6-8 and 10-33.

2. Claims canceled: 2-5 and 9

3. Claims rejected: 1, 6-8, 10-33

C. Claims On Appeal

The claims on appeal are claims 1, 6-8, 10-33.

IV. STATUS OF AMENDMENTS

The Amendment filed on November 27, 2002 has been entered.

The Amendment After Final filed on June 23, 2003 has not been entered, as indicated in the Advisory Action mailed July 22, 2003.

In accordance with the treatment of the Amendments discussed above, the claims as presented herein in Appendix A do incorporate the amendments presented in the November 27, 2002 Amendment, but do not incorporate the claim amendments proposed in the After Final Amendment dated June 23, 2003.

V. SUMMARY OF INVENTION

The present invention is directed to a system and method for planning and monitoring a project from both a broad perspective and, more importantly, at an individual level for each person involved in the project. The ability to analyze performance at the individual level enables the present invention to more accurately plan the overall timeline of the project and subsequent projects. In contrast, prior art project management tools operate merely at the broad or macro level, and do not take into consideration variable factors which affect the performance of individual employees or workers. As a result, such prior art project management tools typically yield plans which are very inaccurate predictors of the actual time and resources ultimately expended to complete the project.

To achieve the capability mentioned above, the present invention breaks a project down into a plurality of assignable tasks, as does most known project management tools. (e.g., specification, lns. 6-7). The tasks are assigned to specific individuals by first identifying a current "tasking horizon," and then assigning those tasks which may be reasonably started and/or completed within the current tasking horizon. (E.g., specification, p. 6, lns. 7-12; p. 11, ln. 24 – p. 12, ln. 6).

A tasking horizon, as used in the context of this invention, is a window of time, two weeks, for example, for which a person can currently reasonably plan or predict how his or her time will be spent for the duration thereof. Generally, depending on the size, scope and duration of a project, the lifespan of a project will cover a plurality of sequential tasking horizons. Thus, for projects other than short-term projects, for example, the tasking horizon will be a much smaller increment of time than the time period covering the entire project duration. (Id.).

During the initial planning stages of the project and prior to the assignment of any tasks to be performed by specific personnel, a set of structured words and/or phrases, referred to as "verbs" in the application, is predefined in the system for each task. (FIG. 4; specification, p. 6, lns. 13-22; p. 12, lns. 22 – p. 13, ln. 19, esp. p. 13, lns 4-5). Throughout the duration of the project, each worker contributing to the project logs each actual start and end date for the various tasks for which he or she is responsible, and to select a "verb" from the predefined set. (e.g., specification, p. 7, lns. 4-8; p. 14, lns. 13-17). The "verb" is selected from the predefined set to describe why the actual date occurred either earlier or later than the estimated date, or why the actual date was enabled to occur on the estimated date. (Id.).

Using the predicted dates, actual dates and verbs logged by each worker, the project status is automatically updated in real time as the information is entered. Information which can be determined via the automatic real time updating process include expected task completion times, risk factors that each task will not be completed according to the estimated times, and a measure of the accuracy or inaccuracy with which each worker can predict the timing of his or her performance of his or her assigned tasks. The process of automatically updating the project status in real time is accomplished at least in part by generating a table containing information regarding the current tasks, accessing a look-up table containing performance information of similar

tasks for previous projects and comparing the current information with the historical information.

VI. ISSUES

Are claims 1, 6-8, and 10-33 properly rejected under 35 U.S.C. § 103 as being unpatentable over the book entitled A Guide to the Project Management Body of Knowledge, by PMI Standards Committee, William R. Duncan, Director of Standards, (pub. Project Management Institute, 1996) (hereinafter "Duncan") in view of U.S. Patent No. 6,047,260 to Levinson (hereinafter "Levinson"), either with or without reliance on Official Notice?

VII. GROUPING OF CLAIMS

For purposes of this appeal brief only, and without conceding the teachings of any prior art reference, the claims have been grouped as indicated below:

Group	Claim(s)
I.	Claims 1, 10, 12-14, 16, 18-19, and 21-22 stand or fall together.
II.	Claims 7, 17, 20, 24-27, 29, and 31-32 stand or fall together.
III.	Claims 6 and 8 stand or fall together.
IV.	Claim 11 stands or falls by itself.
V.	Claims 15, 23, 28 and 33 stand or fall together.
VI.	Claim 30 stands or falls by itself.

In Section VIII below, Appellant has included arguments supporting the separate patentability of each claim group as required by M.P.E.P. § 1206.

VIII. ARGUMENTS

A. CLAIMS 1, 6-8, AND 10-33 ARE NOT RENDERED OBVIOUS BY DUNCAN IN VIEW OF LEVINSON

1. The Concept of the Term "Tasking Horizon" as Claimed and Defined in Connection with the Invention is Neither Taught nor Suggested in the cited combination of Duncan and Levinson.

Claim 1 recites, *inter alia*, "setting a tasking horizon based on a predetermined time interval." Claim 11 depends from claim 1 and recites "computing churn . . . based on differences between corresponding . . . predicted [dates] and actual dates relative to said tasking horizon." Similarly, independent claim 10 recites "a management module . . . for setting a tasking horizon" and "at least one task assignment station for receiving information of at least one task having a task related event expected to be performed during said tasking horizon."

The final Office Action contends that Duncan discloses the claimed "tasking horizon" as used within the context of the present invention. This is an incorrect interpretation of the term "tasking horizon" and/or Duncan. As will become evident below, the meaning of what the final Office Action considers to be a "tasking horizon" is very different from the actual meaning of the term as used in the present invention. Furthermore, a substitution of what the Office Action considers to be a tasking horizon as disclosed in Duncan is inconsistent with the claimed invention and would render the invention inoperable.

The term "tasking horizon" as recited in claims 1 and 10 is described in the present application as being "designed to be a realistic planning window that corresponds to the length of time most employees can plan their work" (specification, p. 6, lns. 8-12; p. 11, last 2 lines through page 12, ln. 6). The reason for this is that "the

most effective planning is generally limited to a predetermined period of time, which is likely to be much smaller than the project time period." (*Id.*) (emphasis added). Thus, each tasking horizon is a fixed window of time within which any of a plurality of tasks dates can be scheduled into or removed therefrom (*see, e.g.*, specification, p. 15, lns. 1-2, p. 16, lns. 5-22).

The present invention then analyzes the movement of task dates into and out of the relevant tasking horizon to assess the accuracy with which the estimated dates were predicted. In other words, the progress of the various tasks in a project is measured with respect to this planning window. As such, the period of time encompassed by a tasking horizon is necessarily a window of time which is independent of any specific task in the project. The independence of the tasking horizon from all estimated dates and actual dates for the task related events is illustrated on page 13, lines 20-24, *inter alia*, of Appellant's specification, which discloses, for example, that "[t]he final step is to assign the tasks 20 that occur during the tasking horizon .... Each day, or at set intervals, the system checks the unassigned tasks and assigns tasks that fall within the next tasking horizon." Additionally, page 16, lines 10-22 in the specification relies upon the concept of a current "tasking horizon" as a frame of reference for explaining the concept of "churn" based on the movement of estimated dates and actual dates and out of the current tasking horizon.

In contrast, the final Office Action indicates that the "tasking horizon" as recited in Appellants' claims is met by section 3.3.2 and p. 170 in Duncan, *i.e.*, "described in the context of target finish date determination and schedule determination." (final Office Action, p. 3). Page 170 in Duncan, however, is merely a glossary page which nowhere discloses a tasking horizon as used in Appellant's invention. Section 3.3.2 in Duncan merely provides an overview of the "Planning Processes" that are performed in a project. The portion of this cited section most relevant to Appellant's "tasking horizon"

concept is Duncan's "Activity Duration Estimating" and "Schedule Development," both mentioned on page 31 in Duncan.

In order to fully evaluate the teachings of Duncan with respect to Appellant's claimed "tasking horizon," therefore, a closer review of the "Activity Duration Estimating" and "Schedule Development" processes in Duncan is warranted. As indicated in parentheses following the identification of these processes on page 31 in Duncan, these processes correspond to sections 6.3 and 6.4 in Duncan, respectively.

A careful reading of sections 6.3 reveals that the most relevant teaching there is found on page 66 in section 6.3.3.1 entitled "[a]ctivity duration estimates," in which it is noted that "[a]ctivity duration estimates are quantitative assessments of the likely number of work periods that will be required to complete an activity." This is quite different from Appellant's "tasking horizon," which is an objective time frame and is not defined in relation to any specific task or activity, or the expected duration for performing any specific task or activity.

Similarly, the most relevant discussion in section 6.4 is found in subsection 6.4.3.1 entitled "[p]roject schedule" on page 69 in Duncan, which discloses "planned start and expected finish dates for each detail activity." The "planned start and expected finish dates" of Duncan most closely correspond to the "predicted dates" disclosed and claimed in the present application, and not the term "tasking horizon." Moreover, if a tasking horizon is defined to be the period of time encompassed by the predicted start and stop dates of a task, as proffered in the final Office Action, it is not possible for a predicted (estimated) date be created in, moved out of, or moved into a current tasking horizon, as discussed on page 16, lines 10-13 in Appellant's specification, if the estimated date itself defines the beginning or end of the tasking horizon. Clearly, it is impossible to move a task date into or out of a tasking horizon if the time span of the tasking horizon is defined by the task date itself. Based on the "definition" of the term

"tasking horizon" used by the final Office Action, any movement of a task date/estimated date would serve to shift the tasking horizon as well. When the passages in Duncan cited in the final Office Action are considered in light of the actual meaning of the term "tasking horizon" in accordance with Appellant's invention, it is readily apparent that the cited passages do not anticipate or render obvious the process segment of "setting a tasking horizon" as recited in Appellant's claims.

Section 6.5.3.1 entitled "[s]chedule updates" on page 72 in Duncan teaches that "[r]evisions are changes to the scheduled start and finish dates in the approved project schedule. As in the other sections of Duncan mentioned above, or for that matter, the entire book, there is absolutely no mention or contemplation of an objective time frame smaller than the project time frame which is independent from the tasks or activities of the project, as is Appellant's term "tasking horizon."

As demonstrated by the analysis above, the unique concept of framing the progress of a project through a sequence of fixed time periods, as defined by the term "tasking horizon" in the claimed invention, is not taught or suggested in Duncan.

Levinson also fails to teach or suggest the concept of a tasking horizon as defined and used in connection with the claimed invention, and as such, also fails to teach or suggest any of the elements recited in Appellant's claims 1, 10 and 11 which are performed in relation to such tasking horizon. Also, the final Office Action does not contend that Levinson is relevant to this claim feature.

2. <u>The Concept of the Term "Verbs" as Claimed and Defined in Connection with the Invention is Neither Taught nor Suggested in the cited combination of Duncan and Levinson.</u>

Claim 1 also recites "associating at least two verbs" with each task related event, and "for each actual date received, receiving a verb associated with the respective task

related event, said verb being one of said at least two verbs." Similarly, claim 10 recites a management module which assigns at least two verbs for each of a plurality of tasks and "at least one task assignment station . . . for entering a selected one of said at least two verbs for each actual date entered."

In addition to lacking any teaching or suggestion of a "tasking horizon" in accordance with the present application, Duncan also fails to teach or suggest "associating at least two predetermined verbs" with each task related event as recited in claims 1 and 10. As described in the context of the present invention, "verbs" are part of a predefined and structured set or sets of words and phrases (or reasons) that have been programmed into the modeling system of the present invention, so as to enable a standardized dialogue between project managers and project workers. (*See, e.g.*, FIG. 4; specification p. 6, lns. 13-22, and p. 12, ln. 22 – p. 13, ln. 13). For example, Appellants' specification describes the inventive system as including the following processes:

"Once the tasks in a project have been determined, the next aspect of the present invention is the planning of the tasks" (p. 11, lns. 20-21). "The next step is to assign verbs [ ] 18 to each task" (p. 12, ln. 22). Then, "[t]he final step is to assign the tasks 20 that occur during the tasking horizon" (p. 13, ln. 20).

This process sequence is visually summarized in FIG. 4, which shows a flow chart of an "employer task assignment stage" 10 of the invention. As can be seen in FIG. 4, the step of "selecting verbs" 18 occurs after the step of identifying a tasking horizon 16, and before the step of "assigning tasks" 20 to specific workers to perform the tasks. Categories of pre-selected "verb" sets are discussed in Appellants' specification on page 13, for example. It can be seen, therefore, that the term "verb" as used in the present invention is a predefined, structured set or sets of words and/or phrases selected during the planning stages of the project, before the tasks are assigned to be performed by specific workers.

The final Office Action asserts that the process segment of "associating at least two [] verbs with [each] task related event" as recited in Appellants' claims is met by section 4.3.3.3 in Duncan, entitled "[l]essons learned" (final Office Action, p. 4). Section 4.3.3.3 in Duncan (p. 46) states that "[t]he causes of variances, the reasoning behind the corrective action chosen, and other types of lessons learned should be documented so that they become part of the historical database for both this project and other projects of the performing organization." Thus, it can be seen that the "lessons learned" in Duncan merely reflect the generalized concept and goal of learning from the past, and is not restricted to associating predetermined words or phrases to be selected later by a worker. Nowhere in the cited section of Duncan, or, for that matter, anywhere in Duncan's entire disclosure is there any suggestion of a set or sets of predetermined, structured words or phrases associated with the tasks or task related events of the tasks during a planning phase of the process, as defined by the term "verbs" used in the present invention.

Levinson also does not teach or suggest associating predetermined, structured words or phrases with tasks or task related events for later selection by a user, as recited in claims 1 and 10, nor does the final Office Action contend that it does.

3. Neither Duncan Nor Levinson Teaches or Suggests Automatically Updating the Project Status in Real Time.

Independent claims 1, 10, 24 and 29 each recites a process step, a module or a system which automatically updates the project status in real time, based on captured information regarding project tasks or task related events.

The final Office Action concedes that Duncan does not disclose this claimed feature. To address this deficiency in Duncan (the previously discussed deficiencies of Duncan in meeting Appellant's claims notwithstanding), the final Office Action asserts that such feature is disclosed in Levinson, and that one of ordinary skill in the art would

have found it obvious at the time of Appellant's invention to modify the project management guide disclosed in Duncan to incorporate the relevant teaching of Levinson. A thorough review and consideration of Levinson reveals that Levinson does not, in fact, teach or suggest automatically updating a project status in real time in response to captured information.

Levinson is directed to a task minder and calendaring system for use by busy people or individuals with cognitive disorders who have trouble keeping track of one's daily activities (col. 1, ln. 56 – col. 2, ln. 51; col. 5, lns. 55-59). In this regard, the disclosed system stores information about a user's daily tasks and appointments, and creates a schedule based on priority of the event and/or time constraints inputted by a person entering the information into the system (e.g., col. 5, ln. 66 – col. 6, ln. 6; col. 7, ln. 64 – col. 8, ln. 6). Once the user's schedule has been determined, Levinson's system activates an alarm for each event to cue the user throughout the day to attend to the scheduled appointment, task, or event. The system may adapt the schedule based on input by the user to accommodate unforeseen circumstances which necessitate the rearrangement of the daily schedule. (See, e.g., col. 7, lns. 14-16; col. 8, lns. 28-37; col. 8, ln. 64 – col. 9, ln. 7).

As pointed out in the final Office Action, Levinson discloses at column 4, lines 32-41 the general concept of updating an appointment or event schedule as changes occur for various reasons. Of course Appellant does not dispute that the concept of updating a schedule is known. What must be considered, however, is the claimed process or function of updating in the manner and within the context of the invention as claimed. To this end, Levinson's disclosure does not include the necessary teachings to combine with Duncan to render obvious this feature of Appellant's claimed invention. Specifically, Levinson does not teach or suggest updating a project <u>status</u> (not <u>schedule</u>) in real time in response to information received about the tasks or task

related events associated with that project. Levinson's "updating" merely rearranges the user's schedule as needed but does not provide status information regarding any overall activity encompassing each scheduled appointment or event. Thus, Levinson is also an insufficient supplement to Duncan to render obvious the feature of automatically updating the project status in real time as recited in claims 1, 10, 24 and 29.

4. Neither Duncan Nor Levinson Teaches or Suggests Accessing a Look-Up Table Containing Historical Data and Comparing Information for the Current Tasks with the Historical Data.

Independent claims 24 and 29, and dependent claims 17 and 19 recite a process and system which accesses a look-up table containing historical data. Claims 17, 20, 24 and 30 further recite comparing the information inputted by the users for the current tasks with the look-up table to determine if the current task information is/are associated with any pre-existing project(s) or task(s). Claims 17, 20, 24 and 30 also recite that "upon determining that [the] information in [the] current task table is associated with [] a pre-existing project or task within a pre-existing project, automatically update[ing the] pre-existing project or task."

The final Office Action contends that these features are disclosed on page 109 of Duncan in paragraph 10.3.3.1, and on page 50, paragraphs 5.1.1.4 – 5.1.2.1 in Duncan. These cited passages in Duncan, however, do not disclose accessing a look-up table, comparing the information in the look-up table with information in a current task table, and automatically updating the status of a relevant pre-existing project or task if it is determined that the information in the current task table is associated with a pre-existing project or task, as claimed in the present application. Rather, Duncan discloses in section 5.1.1.4 consideration of historical information, while section 5.1.2.1 discloses

selection of a benefit measurement method and a constrained optimization method as the decision models for planning the project.

Assuming *arguendo* that the generation of the performance reports disclosed in section 10.3.3.1 in Duncan corresponds to a current task table, as asserted in the final Office Action, there is absolutely no mention in Duncan of comparing the historical information (which is not a look-up table) with information in performance reports. Moreover, neither the historical information nor the performance reports are disclosed or suggested as being used to determine whether information in the performance reports are associated with any pre-existing projects or tasks and automatically updating any such pre-existing projects or tasks in real time.

Furthermore, it is noted these elements of the claimed invention, i.e. the claimed features relating to the creation of a current task table, accessing a look-up table, comparing the information in the two tables, and automatically updating the status of pre-existing projects and/or tasks if information from the current task table is found to be associated with the pre-existing projects and/or tasks, are all performed during the execution of the project, and serve to provide real time information regarding the status of the project. In contrast, the cited sections, *i.e.*, sections 5.1.1.4 and 5.1.2.1 in Duncan, are part of the initial planning stages of a project, and occur before the execution of any project tasks or activities. *See, e.g.*, Duncan, Fig. 5-1 on p. 48 and Figs. 3-4 through 3-8 on pp. 30-35. Thus, the cited passages of Duncan cannot logically be construed to render obvious the above-mentioned aspects of Appellant's claimed invention.

Levinson, like Duncan, also fails to teach or suggest accessing a look-up table containing historical information relevant to pre-existing project and/or tasks. Levinson therefore also does not disclose comparing information from a current task table to

information from such look-up table to thereby associate information of a current task table with any pre-existing projects and/or tasks as recited in claims 17, 19, 20, 24 and 30. Appellant further notes that in addition to being distinguishable over Duncan and Levinson on the basis of their recited features, claims 17, 19, 20 and 30 are also distinguishable over these references on the basis of the features recited in their respective independent claims as discussed above.

5. Neither Duncan Nor Levinson Teaches or Suggests Calculating a Risk Factor as Claimed in Accordance with Appellant's Invention.

While claims 6 and 8 are each ultimately dependent from claim 1 and therefore incorporate the patentably distinguishable features discussed above recited in claim 1, claims 6 and 8 also recite additional subject matter which renders the claims allowable over Duncan. Specifically, claims 6 and 8 each recite "computing a risk factor" or the capability to do so. Appellants' specification describes the term "risk factor" as either a percentage probability that an actual task date will deviate from the estimated task date, for example, or as a standard deviation of time within which the actual task date is likely to vary from the estimated date (specification, p. 19, ln. 3 – p. 20, ln. 6; p. 22, ln. 19 – p. 23, ln. 10, *inter alia*). That is, the risk factor computed in the claimed invention is a statistical number representing a probability.

The final Office Action contends that Fig. 11-1 on page 112 and section 11.2 and FIG. 11-2 on pages 115-118 in Duncan, entitled "Risk Quantification," and sections 11.1 through 11.3, generally, on pages 111-121 renders obvious the risk factor computation recited in Appellant's claims. (final Office Action, p. 5, p. 6). As disclosed in the last paragraph of page 111 and on lines 3-4 on page 115 in Duncan, sections 11.1 and 11.2 relate to the identification of risk events and the determination of which risk events warrant response. Such determination is accomplished by identifying discrete risk

events (Duncan, sections 11.1, 11.2.1.2, 11.2.1.3, at p. 115) and evaluating each discrete risk event (Duncan, section 11.2.2, at pp. 115-116), to thereby enable a decision to be made as to which risk events should be addressed (Duncan, section 11.2.3 at p. 117). Section 11.2.2 discloses calculating the potential costs of each risk event (monetary value), whereas section 11.3 discloses the process for risk response development. None of these sections discloses calculating a risk factor as a statistical number representing the probability that an actual date will vary from a predicted date as recited in Appellant's claims.

Moreover, as shown in Figure 3-5 on page 31, section 11.1-11.3, the "Risk Identification," "Risk Quantification," and "Risk Response Development" topics fall within the planning stages of the project, before execution of any tasks have begun. In Appellant's claim 6, however, the risk factor is recited as being computed based on churn data and received verb data. In order to obtain churn data and received verb data, at least a portion of a task within a project must have been executed. Thus, the cited sections in Duncan do not teach or suggest computing a risk factor during the execution phase of the project, much less based on computed churn and a selected verb, as recited in Appellant's claim 6.

With respect to the computed risk factor as recited in claim 8, nowhere in the cited passages in Duncan or even the entire disclosure of Duncan is it taught or suggested to compute a risk factor based on previously computed risk factor associated with at least one past project, as recited in the claim.

As demonstrated herein, since the risk factors of the claimed invention are calculated using data received during the execution of the project, Duncan cannot be construed to render obvious this aspect of the claimed invention.

Since risk is nowhere mentioned in Levinson's disclosure, Levinson does not remedy the deficient disclosure of Duncan with respect to the claimed risk factors recited in claims 6 and 8.

6. The Cited Combination of Duncan and Levinson Do Not Teach or Suggest the Concept of Computing "Churn."

Claim 11 depends from claim 1 and hence incorporates each of the features discussed above attributable to claim 1 which distinguish the claimed invention over the cited prior art. In addition to this, claim 11 further recites "computing churn . . . based on differences between corresponding ones of [] received predicted and actual dates relative to said tasking horizon." Page 15, line 1 through page 16, line 22, provides a detailed explanation of all the scenarios in which churn is generated, including when a predicted or estimated date differs from an actual date. For example, the specification explains that churn is generated when the actual date for a task event is different from an estimated date, and the actual date is not in the same tasking horizon as the estimated date (specification, p. 16, lns. 14-16, 20-22). Since churn generation is always predicated on a change into or out of a tasking horizon or on the difference of dates in which the estimated and actual dates are in different tasking horizons, if the estimated date is different from the actual date, but both are in the same tasking horizon, then no churn is generated. Thus, churn is only calculated relative to a current tasking horizon. In order to do so, it is therefore essential to first set a tasking horizon which is independent of any task or task related event.

The final Office Action concedes that the claimed feature of "computing churn . . . relative to [a] tasking horizon" is not disclosed in Duncan, but then nevertheless asserts that it would have been obvious "to modify Duncan to specifically compute churn . . . because Duncan does disclose the necessary functionality for these computations and these specific features may enhance the desirability of the invention

to potential users." (final Office Action, p. 6, last para.). There are two inherent defects in this assertion. The first defect lies with the statement that Duncan's "functionality" renders obvious the concept of churn as relevant to Appellant's claimed invention. The second is the logic that the claimed invention is obvious because this feature of Appellant's claimed invention would "enhance the desirability of the invention to potential users." Each of these points will be discussed separately below.

The final Office Action contends that paragraph 10.3 on pages 107-108, Fig. 10-2 on page 109, Fig. 10-3 on page 110, and paragraph 11.1.1 on page 113 in Duncan "disclose[s] the functionality for computing churn for said tasks." (final Office Action, p. 5). Nowhere in these cited passages and figures, or anywhere else in the entire reference, does Duncan disclose computing anything relative to a difference between two dates relative to a tasking horizon or any other fixed quantity. The closest concept in Duncan to Appellant's churn computation feature is sections 10.3.2.2 and 10.3.2.4 on page 108 in Duncan, and Fig. 10-3, which discloses only "comparing actual project results to planned or expected results" for cost and schedule variances in section 10.3.2.2, and the concept of calculating the difference between a projected cost and an actual cost in section 10.3.2.4 and Fig. 10-3. These variances in Duncan are simple differences between estimated and actual data. Duncan is completely silent as to the computation of these variances with respect to a tasking horizon or any other fixed standard. As such, Duncan does not disclose or suggest the "functionality" of computing churn as recited in Appellant's claim.

The final Office Action admits that Duncan does not disclose computing churn relative to a tasking horizon. Absent specific disclosure or suggestion in the reference of this feature, however, the final Office Action's reasoning that it would have been obvious to modify Duncan to perform such a computation because "these specific features may enhance the desirability of the invention" smacks of improper hindsight to

justify the conclusion of obviousness. Just because Appellant's invention is desirable does not mean that it is obvious. Proper motivation for modifying Duncan according to the Appellant's claimed invention can only be established upon a showing of such a teaching or suggestion in the prior art, without the benefit of Appellant's disclosure. In re Sponnoble, 405 F.2d 578, 585, 160 U.S.P.Q. 237, 243 (CCPA 1969). Accord, In re Zurko, 111 F.3d 887, 890, 42 U.S.P.Q.2d 1476,1479 (Fed. Cir. 1997). See also In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). Since no demonstration has been shown that Duncan or any prior art teaches or suggests calculating churn relative to a tasking horizon, this aspect of the claimed invention is not rendered obvious by the cited prior art.

Levinson is unable to supplement Duncan in meeting the claimed feature of churn computation, since there is nothing in Levinson's disclosure which corresponds to the concept of churn (which relies on the concept of a tasking horizon, which is also lacking in Levinson), as recited in claim 11.

7. The Cited Combination of Duncan and Levinson, With or Without Further Reliance on Official Notice, Does Not Teach or Suggest the Claimed Feature of Micro-Analyzing Various Aspects of a Particular Worker's Contribution to the Project.

Claims 15, 23, 28 and 33 each recites micro-analyzing various factors of an individual's performance, including, *inter alia*, effort, cost data, churn, work performance, task performance, contributions to the project, and contributions to a company.

The final Office Action acknowledges that this feature is not disclosed in either Duncan or Levinson, but contends that the abstract in Levinson discloses "analyzing at least one of an individual's effort, cost data, churn, work performance, and contributions to the project, contributions to a company based on the captured

information, and the identification of the user" (emphasis added). Such teaching, however, is not found in the abstract of Levinson or anywhere else in Levinson's disclosure. As mentioned above, Levinson is concerned with planning and cueing a user's daily schedule, and not with an analysis of a user's performance for evaluation and project management purposes.

The final Office Action then takes Official Notice that "users or employees of business assets (e.g., computer, workstation, telephone) typically have the business assets assigned to them by the business, and that the business security practices require employees or users to use their assigned business assets." Assuming *arguendo* that this taking of Official Notice is appropriate, this recognized element has no bearing on micro-analyzing an individual's performance, etc., in a project or as contributions to a company as recited in Appellant's claims. As such, claims 15, 23, 28 and 33 are distinguishable over the cited prior art based on their recited subject matter, in addition to the subject matter recited in their respective independent claims.

B. MOTIVATION FOR MODIFICATION OF REFERENCE MUST BE SHOWN IN THE PRIOR ART

Appellant does not dispute that certain general concepts constituting a few individual elements of the claimed invention, such as setting an estimated date for a specific action, recording an actual date of performance for that specific action, updating a store of information, and project planning and management in general, are known. Even if each and every feature of the claimed invention is known in the prior art as an independent concept (which is not the case), it is improper to reject Appellant's claims on the basis of a random assortment of such previously known concepts. That is, any combination of such concepts to reject Appellant's claims must be supported by

motivation specifically identified in the prior art. If no such motivation is demonstrated, then the combination is improper.

As recognized by the Federal Circuit in Panduit Corp. v. Dennison Mfg. Co., "[v]irtually all inventions are necessarily combinations of old elements." 810 F.2d 1561, 1 U.S.P.Q.2d 1593, 1603, *cert. den.*, 481 U.S. 1052 (1987). "But the elements are capable of an infinity of permutations," Judge Learned Hand observed in B.G. Corp. v. Walter Kidde & Co., Inc., "and the selections of that group which proves serviceable to a given need may require a high degree of originality. It is that act of selections which is the invention." 79 F.2d 20, 26 U.S.P.Q. 288, 289 (2d Cir. 1935). Thus, in establishing obviousness by combining or modifying prior art references, it is required that the teaching, suggestion or incentive for combining the references be found in the prior art.

The requirement for demonstrating motivation in the references when rejecting a claim under obviousness is well-established in case law. In In re Mills, the Federal Circuit held that "[w]hile [the prior art] apparatus may be capable of being modified to run the way [Appellant's] apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d 680, 682, 16 U.S.P.Q.2d 1430, 1432 (1990). Similarly, in Ex Parte Levengood, the Board of Appeals reversed a rejection, stating that "[a]t best, the examiner's comments regarding obviousness amount to an assertion that one of ordinary skill in the relevant art would have been able to arrive at the appellant's invention because he had the necessary skills to carry out the requisite process steps. This is an inappropriate standard for obviousness." 28 U.S.P.Q.2d 1300, 1301 (Bd. Pat. App. Int. 1993). *See also* In re Bond, 910 F.2d 831, 834, 15 U.S.P.Q.2d 1566, 1568 (Fed. Cir. 1990); MPEP 2143.01.

Unless Duncan and Levinson, either each by itself or in combination with each other or other cited prior art, provide a motivation to modify the disclosed project management guide of Duncan to meet the invention as claimed by Appellant, any

conclusion that Appellant's claimed invention is obvious over Duncan and Levinson constitutes improper hindsight reconstruction based on knowledge gleaned from Appellant's own specification, and as such, is impermissible. *See, e.g.,* In re Gorman, 18 U.S.P.Q.2d 1885, 1888 (Fed. Cir. 1991) (stating that "[i]t is impermissible . . . [to use] the applicant's structure as a template and [select] elements from references to fill the gaps."). *See also* MPEP 2141 (instructing that "[w]hen applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: . . . (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention."). In this case, one of ordinary skill in the art could only have made the leap from Duncan's general guide to Appellant's specifically claimed invention by improperly reconstructing the claimed invention using hindsight knowledge of Appellant's disclosed invention.

Not only are the final rejections of Appellant's claims refuted by these fundamental principals of patent law, Appellant additionally submits that the claimed invention directed to managing and monitoring a project as recited in claims 1, 6-8 and 10-33 is unique as a whole, and includes unique concepts not previously considered in the prior art, as evident from the discussions presented above.

C. CLAIMED INVENTION MUST BE CONSIDERED AS A WHOLE

In order to properly reject the claims under obviousness, the claimed invention, as a whole, must be taught or suggested in the prior art. However, when one of ordinary skill in the art considers the general fabric of the project management guide disclosed in Duncan and the calendar system disclosed in Levinson, and compares them to the general fabric of the project management method and apparatus disclosed and claimed in the present application, it is clear that the claimed invention is uniquely

and irreconcilably distinct from Duncan and Levinson. Specifically, Duncan is a generalized outline or guide to be used as a reference for a project manager in managing a project. The claimed invention, however, recites a level of detail in the performance and operation of a project management process and system which is simply not contemplated in the overview guide disclosed in Duncan. Levinson is not concerned with management of an overall project, but merely with scheduling a number of individual and independent events and tasks.

Clearly, both Duncan and the claimed invention are directed towards project management. Both will naturally share some common elements, such as the goal towards efficiency and effectiveness, both involve elements of time, and project related tasks and activities, etc. Similarly, Levinson, like the claimed invention, involves the scheduling of dates. In order to find obviousness, however, it is necessary to look beyond the general similarities which allows each process to be categorized as a project management process (or system), and focus on the distinct features of the claimed invention. Specifically, the claimed invention can only be rendered obvious by Duncan and Levinson if a reading Duncan and Levinson would conjure up in the mind of one of ordinary skill in the art the specific steps and details recited in the Appellant's claims. In this case, it would not.

For each of the foregoing reasons, Appellant respectfully submits that the claimed invention is not rendered obvious by Duncan and Levinson, with each considered alone or in combination. Withdrawal of this rejection is respectfully requested.

D. CONCLUSION

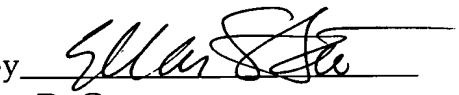
Appellant respectfully submits that each of pending claims 1, 6-8, and 10-33 are allowable over the prior art of record. Accordingly and for each of the reasons presented above, Appellant respectfully requests that Board reverse the rejection of claims 1, 6-8, and 10-33 under 35 U.S.C. § 103 over the cited combination of Duncan and Levinson (including the rejection of claims 12-15 over Duncan, Levinson and Official Notice as set forth on pages 11-14 in the final Office Action).

IX. CLAIMS INVOLVED IN THE APPEAL

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

Dated: October 27, 2003

Respectfully submitted,

By 

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APPENDIX A

Claims Involved in the Appeal of Application Serial No. 09/536,377

1. A method for monitoring and managing a project, comprising the steps of:

breaking a current project into a plurality of tasks, wherein the status of said project is tracked on the basis of at least one task related event for each of said plurality of tasks;

setting a tasking horizon based on a predetermined time interval;

associating at least two verbs with said at least one task related event for each of said plurality of tasks;

receiving a respective predicted date for at least one task related event;

receiving a corresponding actual date for each task related event for which a predicted date was received;

for each actual date received, receiving a verb associated with the respective task related event, said received verb being one of said at least two verbs;

and

capturing at least the predicted dates, actual dates and verbs received for each of said task related events and automatically updating the project status based on the captured information, to thereby provide accurate and real time data regarding said current project and said plurality of tasks of said project.

2. (Previously cancelled).

3. (Previously cancelled).

4. (Previously cancelled).

5. (Previously cancelled).

6. The method according to claim 11, further comprising the step of:

computing a risk factor for at least one of said plurality of tasks based on data of at least one of said computed churn and said received verb, said data corresponding respectively to said at least one of said plurality of tasks.

7. The method according to claim 1, further comprising the steps of:

comparing said plurality of tasks of said current project to a plurality of tasks of at least one past project;

extracting previously performed task completion data for said plurality of tasks for said at least one past project; and

computing an expected task completion time for at least one of said plurality of tasks of said current project based at least in part on said previously performed task completion data.

8. The method according to claim 1, further comprising the steps of:

comparing said plurality of tasks of said current project to a plurality of tasks of at least one past project;

extracting at least one risk factor associated with said plurality of tasks of said at least one past project;

and computing a risk factor for at least one of said plurality of tasks for said current project based at least in part on said extracted at least one risk factor.

9. (Previously cancelled).

10. An apparatus for monitoring and managing a project, comprising:

a management module for breaking a project into a plurality of tasks, for setting a tasking horizon and for assigning at least two verbs for at least one of said plurality of tasks;

at least one task assignment station for receiving information of said at least one task, for entering a respective predicted date for each of at least one task related event relevant to the performance of said at least one task, for entering a respective actual date for each of said at least one task related event, each actual date corresponding to a respective predicted date for one task related event, and also for entering a selected one of said at least two verbs for each actual date entered;

wherein said management module and said task assignment station are operationally connected and wherein said management module receives predicted dates and actual dates entered at said task assignment station; and

an automatic project updating module for capturing at least the predicted dates, actual dates and verbs received for each of said task related events and automatically updating the project status based on the captured information, to thereby provide accurate and real time data regarding said current project and said plurality of tasks of said project.

11. The method according to claim 1, further comprising the step of:

computing churn for each task related event for which a predicted date and an actual date was received, based on differences between corresponding ones of said received predicted and actual dates relative to said tasking horizon.

12. The method according to claim 1, wherein information relating to the performance of said plurality of tasks can be captured automatically upon use of an electronic communication device.

13. The method according to claim 12, wherein said information relating to the performance of said plurality of tasks is provided via a device selected from the group consisting of a computer, a telephone, a facsimile machine, a copier machine, a laptop computer, a personal digital assistant, a cellular telephone, and a wireless telephone.

14. The method according to claim 12, further comprising identifying a user upon the use of a specific device to provide information relating to the performance of said plurality of tasks.

15. The method according to claim 12, further comprising micro-analyzing at least one of an individual's effort, cost data, churn, work performance, task performance, contributions to said project, and contributions to a company based on said captured information, the identification of the user, and the specific device used to provide said information.

16. The method according to claim 1, wherein information relating to the performance of said plurality of tasks is captured from at least one of electronic mail, documents, spreadsheets, and over the internet.

17. The method according to claim 1, further comprising:

processing the captured information to generate a current task table;

accessing a look-up table containing historical data;

comparing said information in said current task table with said historical data in said look-up table to determine whether said information of said current task table is associated with a pre-existing project or a task within said pre-existing project; and

upon determining that said information in said current task table is associated with one of a pre-existing project or a task within a pre-existing project, automatically updating said pre-existing project or said task within said pre-existing project.

18. The apparatus according to claim 10, wherein the automatic project updating module includes a task data processing system and at least one medium for providing data to said task data processing system.

19. The apparatus according to claim 18, wherein said task data processing system includes

a processor database system for processing captured information and generating a current task table, and

a look-up table containing historical information relevant to all project and task data within said data processing system.

20. The apparatus according to claim 19, wherein said task data processing system compares information in a generated current task table with said historical information in said look-up table to determine whether said information of said current task table is associated with a pre-existing project or a task within said pre-existing project; and upon determining that said information in said current task table is associated with one of a pre-existing project or a task within a pre-existing project, automatically updates said pre-existing project or said task within said pre-existing project.

21. The apparatus according to claim 18, wherein said at least one medium includes at least one of a computer, a telephone, a facsimile machine, a copier machine, a laptop computer, a personal digital assistant, a cellular telephone, and a wireless telephone.

22. The apparatus according to claim 18, wherein said automatic project updating module is capable of identifying a user upon the use of a specific device to provide information relating to the performance of said plurality of tasks.

23. The apparatus according to claim 22, wherein the automatic project updating module micro-analyzes at least one of an individual's effort, cost data, churn, work performance, task performance, contributions to said project, and contributions to a company based on said captured information, the identification of the user, and the specific device used to provide said information.

24. A method for monitoring and managing a project, comprising the steps of:

capturing information relating to the performance of a plurality of tasks within a project;

processing said captured information to generate a current task table;

accessing a look-up table containing historical data;

comparing said information in said current task table with said historical data in said look-up table to determine whether said information of said current task table is associated with a pre-existing project or a task within said pre-existing project; and

upon determining that said information in said current task table is associated with one of a pre-existing project or a task within a pre-existing project,

automatically updating said pre-existing project or said task within said pre-existing project.

25. The method according to claim 24, wherein said information relating to the performance of said plurality of tasks can be captured automatically upon use of an electronic communication device.

26. The method according to claim 25, wherein said information relating to the performance of said plurality of tasks is provided via a device selected from the group consisting of a computer, a telephone, a facsimile machine, a copier machine, a laptop computer, a personal digital assistant, a cellular telephone, and a wireless telephone.

27. The method according to claim 25, further comprising identifying a user upon the use of a specific device to provide information relating to the performance of said plurality of tasks.

28. The method according to claim 27, further comprising micro-analyzing at least one of an individual's effort, cost data, churn, work performance, task performance, contributions to said project, and contributions to a company based on said captured information, the identification of the user, and the specific device used to provide said information.

29. An automatic project updating module for monitoring and managing a project, comprising:

at least one communication medium for providing information relating to the performance of a plurality of tasks within a project;

a task data processing system for capturing said information relating to the performance of said plurality of tasks provided via said at least one communication medium, and for automatically updating the status of the project in real time, said task data processing system including

a processor database system for processing captured information and generating a current task table, and

a look-up table containing historical information relevant to all project and task data within said data processing system.

30. The automatic project updating module according to claim 29, wherein said task data processing system compares information in a generated current task table with said historical information in said look-up table to determine whether said information of said current task table is associated with a pre-existing project or a task within said pre-existing project; and upon determining that said information in said current task table is associated with one of a pre-existing project or a task within a pre-existing project, automatically updates said pre-existing project or said task within said pre-existing project.

31. The automatic project updating module according to claim 29, wherein said at least one medium includes at least one of a computer, a telephone, a facsimile machine, a copier machine, a laptop computer, a personal digital assistant, a cellular telephone, and a wireless telephone.

32. The automatic project updating module according to claim 29, wherein said automatic project updating module is capable of identifying a user upon the use of

a specific device to provide information relating to the performance of said plurality of tasks.

33. The automatic project updating module according to claim 32, wherein the automatic project updating module micro-analyzes at least one of an individual's effort, cost data, churn, work performance, task performance, contributions to said project, and contributions to a company based on said captured information, the identification of the user, and the specific device used to provide said information.